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Customer No.: 31561  
Application No.: 09/837,465  
Docket No.: 14536-US-PA

## IN THE TITLE

A METHOD OF MANUFACTURING PRINTED-ON-DISPLAY ANTENNA OF  
FOR WIRELESS DEVICE MOBILE PERSONAL TERMINAL

## IN THE ABSTRACT

A method of manufacturing a printed-on-display (POD) antenna is mounted on a  
for a wireless device is provided mobile personal terminal. The POD antenna is formed  
of First, a conductive transparent material such as layer comprising indium oxide doped  
with tin oxide (ITO) is coated on a glass substrate. The POD antenna is printed on a  
glass substrate of display of the personal terminal by physical vapor deposition (PVD)  
or chemical etching. Pattern of the POD antenna is configured to have a radiation  
pattern the same as a conventional monopole antenna and an omni-directional  
characteristics. Hence, the POD antenna may be embedded, resulting in an elimination  
of drawbacks of conventional exposed antenna such as liable to damage, complex in  
assembly, and high in cost. Next, a photoresist layer is coated on the conductive  
transparent layer and then a mask having an antenna pattern is disposed on the  
photoresist layer. Next, the mask is exposed by ultraviolet (UV) rays. Thereafter, the  
photoresist layer is developed and cured. Finally, the conductive transparent layer is  
etched to form a patterned conductive transparent layer and subsequently the patterned  
photoresist layer is removed.

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